

We claim:

1. Isolated nucleic acid molecule which codes for or is complementary to a nucleic acid molecule which codes for tumor rejection antigen precursor MAGE-3.
2. The isolated nucleic acid molecule of claim 1, which codes for tumor rejection antigen precursor MAGE-3.
3. The nucleic acid molecule of claim 2, wherein said molecule is cDNA.
4. The nucleic acid molecule of claim 3, wherein said molecule has the nucleotide sequence set forth in SEQ ID NO: 1 (MAGE-3) or SEQ ID NO: 2 (MAGE-31).
5. Expression vector comprising the nucleic acid molecule of claim 2 operably linked to a promoter.
6. The expression vector of claim 5, further comprising a nucleic acid molecule which codes for HLA-A1.
7. Cell line transfected with the nucleic acid molecule of claim 2.
8. The cell line of claim 7, wherein said cell line expresses HLA-A1.
9. The cell line of claim 7, wherein said cell line is further transfected with a nucleic acid molecule which codes for HLA-A1.
10. Isolated tumor rejection antigen precursor coded for by the nucleic acid molecule of claim 2.
11. Vaccine comprising the isolated tumor rejection antigen precursor of claim 10 and an adjuvant.

12. Isolated tumor rejection antigen derived from the tumor rejection antigen precursor of claim 10, wherein said tumor rejection antigen is antigen D.
- 5 13. Isolated complex of the tumor rejection antigen of claim 12 and HLA-A1.
- 10 14. Method for treating a disorder characterized by expression of tumor rejection antigen precursor MAGE-3, comprising administering to a subject an amount of a cytolytic T cell specific for complexes of a tumor rejection antigen derived from MAGE-3 and a human leukocyte antigen molecule, sufficient to generate an immune response against said complexes.
- 15 15. The method of claim 14, wherein said human leukocyte antigen is HLA-A1.
- 20 16. The method of claim 15, wherein said tumor rejection antigen is antigen D.
- 25 17. Method for treating a disorder characterized by expression of tumor rejection antigen precursor MAGE-3, comprising administering an agent sufficient to provoke an immune response to complexes of a tumor rejection antigen derived from MAGE-3 and a human leukocyte antigen, to a subject in need thereof.
- 30 18. The method of claim 17, wherein said human leukocyte antigen is HLA-A1.
- 35 19. The method of claim 18, wherein said tumor rejection antigen is antigen D.
20. Method for determining a disorder characterized by expression of tumor rejection antigen precursor MAGE-3, comprising contacting a sample taken from a subject with an agent which identifies said tumor rejection antigen

precursor to determine expression of said tumor rejection antigen precursor as a determination of said disorder.

21. Method for determining a disorder characterized by expression of tumor rejection antigen precursor MAGE-3 and presentation of a tumor rejection antigen derived therefrom by a cell, comprising contacting a sample taken with a subject with an agent which identifies said tumor rejection antigen to determine said tumor rejection antigen as a determination of said disorder.

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